APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,138	02/20/2004	Felix Shedrinsky	11333-026001	5357

26161   7590   07/30/2008
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EXAMINER
NGUYEN, MINH CHAU

ART UNIT	PAPER NUMBER
2145	

MAIL DATE	DELIVERY MODE
07/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/784,138	SHEDRINSKY, FELIX
Office Action Summary	Examiner	Art Unit
	MINH-CHAU NGUYEN	2145

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _04 April 2008_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-12,14 and 16-20_ is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-12,14,16-20_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a) ☐ All b) ☐ Some * c) ☐ None of:
         1. ☐ Certified copies of the priority documents have been received.
         2. ☐ Certified copies of the priority documents have been received in Application No. _____.
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the amendment of the applicant filed on 04/04/08.

Claims 1-12, 14, and 16-20 are presented for further examination.

1. Examiner notes that a title of amendment filed on 04/04/08 such as "Amendment

    after final" and "Amendment in reply to final action of October 5, 2007" are

    incorrect. Examiner only sent out the "Non-final rejection" in October 5, 2007.

    Appropriate correction is required.

Claim Objections

2. Claim 17 is objected to because of the following informalities: the claim claims "a

    machine-readable medium that stores instructions...", it shows the medium

    actually do not store instructions. The claim should be taken off the word "that".

    Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 6, 10-12,14, and 16-20 are rejected under 35 U.S.C. 103(a) as being

    unpatentable over Li et al. (Li) (5,699,523), and further in view of Hovell et al.

    (Hovell) (US 7,116,681 B1).

4. Claim 1, Li teaches a method of transferring data via a communication session

    between a client application behind a first firewall and a server application behind

    a second firewall, the method being performed by at least one device that is not

    behind either the first firewall or the second firewall, the method comprising:

    assigning an identifier to the communication session (i.e. sessionId) [Col.

    4, L. 4-9];

    creating at least one queue associated with the communication session

    (i.e. router queue 3601 in fig. 2);

    storing data (i.e. communication data) passed between the client

    application (i.e. client 39) and the server application (i.e. server 38) in the at least

    one queue (i.e. queue 3601), the data being stored using the identifier [Col. 1, L.

    40-49; and Col. 4, L. 34-67]; and

    receiving, from the client application (i.e. client 39), a command to obtain

    data in the at least one queue destined for the client application (i.e. router 360

    receives from the client a query message to obtain the response in the queue

    3601) [Col. 5, L. 18-28], and receiving, from the server application (i.e. server

    38), a command to obtain data in the at least one queue destined for the server

    application (i.e. "a first queue assigned to the router assuring the storage of the

    messages from clients or servers", from this phrase, the router receives a

command message (i.e. it is implied from <u>the messages</u>); and "a second queue
assigned to the server enabling the reading of messages of requests formulated
to the server", from this phrase, the server obtains the request data which
destined for the server from the queue 3601 of the router) [Col. 1, L. 50-51; Col.
5, L. 18-28];

Li fails to teach wherein the client application and the server application
run local protocols, and the data is passed between the client application and the
server application via an intermediary protocol. However, Hovell, in the same
field of endeavor having closely related objectivity, teaches wherein the client
application (i.e. host 28) and the server application (i.e. host 30) run local
protocols (i.e. IPv6), and the data is passed between the client application and
the server application via an intermediary protocol (i.e. IPv4) [figure 1].

Thus, it would have been obvious to one of ordinary skill in the art at the
time the invention was made to have incorporated Hovell's teachings of wherein
the client application and the server application run local protocols, and the data
is passed between the client application and the server application via an
intermediary protocol, in the teachings of Li in method and apparatus for
communication between at least one client and at least one server, for the
purpose of supporting an advantage for the source/destination host need only
send a standard address request message in its own protocol.

5. Claim 2, Li and Hovell disclose the invention substantially as claimed. Hovell

    teaches creating a socket interface (i.e. a tunneling interface) to at least one of

    the client application (i.e. the host 28 of the first IPv6 domain 12) and the server

    application (i.e. the host 30 of the IPv6 domain 14), data from the at least one

    device (i.e. DNS 20) being transmitted through the socket interface [in fig. 1; and

    Col. 1, L. 47-53].

6. Claim 3, Li and Hovell disclose the invention substantially as claimed. Hovell

    teaches the client application (i.e. the host 28) and the server application (i.e. the

    host 30) are on networks (i.e. a first network and a second network) that run the

    local protocols (i.e. IPv6) [figure 1; and Col. 3, L. 25-32], and wherein conversion

    between the local protocols and the intermediary protocol occurs prior to passing

    the data through the device (i.e. converting between the IPv6 and IPv4 when

    transmitting all packet) [fig. 1&2; and Col. 6, L. 8-Col. 7, L. 50].

7. Claim 6, Li and Hovell disclose the invention substantially as claimed. Li teaches

    wherein the identifier is associated with the at least one queue [Col. 1, L. 40-59;

    and Col. 4, L. 4-67].

8. Claim 10, Li and Hovell disclose the invention substantially as claimed. Hovell

    teaches wherein the communication session is effected via a Web site (i.e. it

inherits that a web site is provided by the web server) [Col. 11, L. 53-64; and Col. 12, L. 28-43].

9. Claim 11, Li and Hovell disclose the invention substantially as claimed. Li teaches further comprising maintaining a session record, the session record including an identity associated with initiation of session [Col. 1, L. 40-59; and Col. 4, L. 4-67].

10. Claim 12, Li teaches a system for transferring data via a communication session between a client application and a server application, the client application running on a first network behind a first firewall and the server application running on a second network behind a second firewall, the system comprising:

a server (i.e. router 360) containing a message queue (i.e. router queue 3601) dedicated to the communication session, the message queue for storing data transmitted during the communication session [Col. 1, L. 40-49; and Col. 4, L. 34-67],

wherein the server is configured to receive, from the client application (i.e. client 39), data (i.e. message of requests) in the message queue (i.e. queue 3601) destined for the server application (i.e. server 38) [Col. 1, L. 50-51; Col. 5, L. 18-28], and to receive, from the sever application (i.e. server 38), data (i.e. response for request messages) in the message queue (i.e. queue 3601)

destined for the client application (i.e. client 39) [Col. 1, L. 50-51; Col. 5, L. 18-
28]; and

wherein the server (i.e. router 360) is configured to receive, from the client
application (i.e. client 39), a command to obtain data in the message queue
destined for the client application (i.e. router 360 receives from the client a query
message to obtain the response in the queue 3601) [Col. 5, L. 18-28], and to
receive, from the server application (i.e. server 38), a command to obtain data in
the message queue destined for the server application (i.e. "a first queue
assigned to the router assuring the storage of the messages from clients or
servers", from this phrase, the router receives a command message (i.e. it is
implied from the messages); and "a second queue assigned to the server
enabling the reading of messages of requests formulated to the server", from this
phrase, the server obtains the request data which destined for the server from
the queue 3601 of the router) [Col. 1, L. 50-51; Col. 5, L. 18-28].

Li fails to teach a proxy having a socket to the client application, the proxy
to convert data between a local protocol run on the first network to a non-local
protocol; an agent having a socket to the server application, the agent to convert
data between a local protocol run on the second network and the non-local
protocol; and a server to enable communication between the proxy and the
agent. However, Hovell, in the same field of endeavor having closely related
objectivity, teaches wherein a proxy (i.e. border router 16A) having a socket (i.e.
an ingress interface in Col. 5, L. 62-65) to the client application (i.e. host 28), the

proxy to convert data between a local protocol (i.e. IPv6) run on the first network (i.e. IPv6 domain 12 in a first network) to a non-local protocol (i.e. IPv4 in a second network) (i.e. the router 16A converts the packets between the IPv6 to IPv4) [fig. 1&2; and Col. 3, L. 24-52; and Col. 5, L. 44-Col. 6, L. 42]; an agent (i.e. border router 16B) having a socket (i.e. an ingress interface in Col. 5, L. 65-Col. 6, L. 2) to the server application (i.e. host 30), the agent to convert data between a local protocol (i.e. IPv6) run on the second network (i.e. IPv6 domain 14 in a third network) and the non-local protocol (i.e. IPv4 in a second network) (i.e. the router 16B converts the packets between the IPv6 to IPv4) [fig. 1&2; and Col. 5, L. 44-Col. 6, L. 42; and L. 55-Col. 7, L. 3]; and a server (i.e. DNS 20) to enable communication between the proxy (i.e. router 16A) and the agent (i.e. router 16B) [figure 1].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Hovell's teachings of a proxy having a socket to the client application, the proxy to convert data between a local protocol run on the first network to a non-local protocol; an agent having a socket to the server application, the agent to convert data between a local protocol run on the second network and the non-local protocol; and a server to enable communication between the proxy and the agent, in the teachings of Li in method and apparatus for communication between at least one client and at least one server, for the purpose of supporting an advantage for the

source/destination host need only send a standard address request message in its own protocol.

11. Claim 14, Li and Hovell disclose the invention substantially as claimed. Li teaches when data is present for the client application (i.e. client 39), the client queue 392 obtains the data (i.e. the response) from the message queue (i.e. router queue 3601) and passes the data to the client application [figure 2; and Col. 4, L. 34-67; and Col. 5, L. 18-28]. Besides this, Hovell teaches the proxy (i.e. router 16A) obtains the data (i.e. the IPv4 address of the 6to4 tunnel endpoint) and transmits the data to the client application (i.e. host 28) [fig. 1&2; and Col. 6, L. 8-Col. 7, L. 3; and Col. 11, L.4-L. 67].

12. Claim 16, Li and Hovell disclose the invention substantially as claimed. Li teaches when data is present for the server application (i.e. server 38), the server queue 381 obtains the data (i.e. the messages of requests) from the message queue (i.e. router queue 3601) and passes the data to the server application [figure 2; and Col. 4, L. 34-67; and Col. 5, L. 1-28]. Besides this, Hovell teaches the agent (i.e. router 16B) obtains the data (i.e. the IPv4 address of the 6to4 tunnel endpoint) from a table (i.e. an end point table 76B), and transmits the data to the server application (i.e. host 30) [fig. 1&2; and Col. 6, L. 8-Col. 7, L. 3; and Col. 9, L. 5-23; and Col. 11, L.4-L. 67].

13. Claim 18, Li and Hovell disclose the invention substantially as claimed. Hovell teaches wherein the intermediary protocol (i.e. IPv4) is different from the local protocols (i.e. IPv6) [fig. 1].

14. Claim 19, Li and Hovell disclose the invention substantially as claimed. Hovell teaches wherein the intermediary protocol (i.e. IPv4) is different from the local protocols (i.e. IPv6) [fig. 1].

15. Claim 20, Li and Hovell disclose the invention substantially as claimed. Li teaches wherein the intermediary protocol is a same protocol as the local protocols [Col. 8, L. 59-64].

16. Claim 17 is corresponding machine-readable medium claim of method claim 1. Therefore, it is rejected under the same rationale.

17. Claims 4,5,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Hovell as applied to claim 1 above, and further in view of Blackett et al. (Blackett) (US 6,792,337 B2).

18. Claim 4, Li and Hovell disclose the invention substantially as claimed. Hovell teaches the local protocols comprise at least one of TCP/IP (i.e. IPv6 is a routing layer datagram service of the TCP/IP suite) [fig. 1].

Li and Hovell fail to teach a serial protocol, the serial protocol comprising one of RS232 and RS485. However, Blackett, in the same field of endeavor having closely related objectivity, teaches a serial protocol, the serial protocol comprising one of RS232 and RS485 [Col. 8, L. 7-22].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Blackett's teachings of a serial protocol, the serial protocol comprising one of RS232 and RS485, with Hovell's teachings of packet network interfacing, in the teachings of Li in method and apparatus for communication between at least one client and at least one server, for the purpose of accomplishing low costs and high performance in the communication sessions.

19. Claim 5, Li and Hovell disclose the invention substantially as claimed. Hovell teaches the intermediary protocol comprise at least one of TCP/IP (i.e. IPv4 is a routing layer datagram service of the TCP/IP suite) [fig. 1].

Li and Hovell fail to teach the intermediary protocol comprises HTTP. However, Blackett, in the same field of endeavor having closely related objectivity, teaches the protocol comprises HTTP [Col. 6, L. 50-60; and Col. 16, L. 67-Col. 17, L. 1].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Blackett's teachings of the protocol comprises HTTP, with Hovell's teachings of packet network interfacing,

in the teachings of Li in method and apparatus for communication between at least one client and at least one server, for the purpose of accomplishing low costs and high performance in the communication sessions.

20. Claim 9, Li and Hovell disclose the invention substantially as claimed. Li teaches wherein the communication session comprises a common session [Col. 4, L. 4-11].

Li and Hovell fail to teach the communication session comprises a telnet session. However, Blackett, in the same field of endeavor having closely related objectivity, teaches the communication session comprises a telnet session [Col. 6, L. 50-60].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Blackett's teachings of the communication session comprises a telnet session, with Hovell's teachings of packet network interfacing, in the teachings of Li in method and apparatus for communication between at least one client and at least one server, for the purpose of accomplishing low costs and high performance in the communication sessions.

21. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Hovell as applied to claim 1 above, and further in view of Colyer (6,023,722).

22. Claim 7, Li and Hovell are relied upon for the disclosure set forth in the previous

rejection. Li teaches wherein the at least device comprises a server (i.e. router

360), and the method further comprise communicate the server 38 to perform the

response for the request message [figure 2; and Col. 4, L. 34-67].

Li and Hovell fail to teach the router performs load balancing. However,

Colyer, in the same field of endeavor having closely related objectivity, teaches

the server performs load balancing [Col. 3, L. 30-48].

Thus, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have incorporated Colyer's teachings of the

server performs load balancing, with Hovell's teachings of packet network

interfacing, in the teachings of Li in method and apparatus for communication

between at least one client and at least one server, for the purpose of

accomplishing low costs and high performance in the communication sessions.

23. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and

Hovell as applied to claim 1 above, and further in view of Niblett et al. (Niblett)

(US 6,336,135 B1).

24. Claim 8, Li and Hovell are relied upon for the disclosure set forth in the previous

rejection. Li teaches the identifier (i.e. sessonId) is validated for the

communication session [Col. 4, L. 4-11].

Li and Hovell fail to teach the identifier is invalidated when the

communication session terminates. However, Niblett, in the same field of

endeavor having closely related objectivity, teaches the identifier is invalidated
when the communication session terminates [Col. 15, L. 25-36].

Thus, it would have been obvious to one of ordinary skill in the art at the
time the invention was made to have incorporated Niblett's teachings of the
identifier is invalidated when the communication session terminates, with Hovell's
teachings of packet network interfacing, in the teachings of Li in method and
apparatus for communication between at least one client and at least one server,
for the purpose of accomplishing low costs and high performance in the
communication sessions.

Response to Arguments

Applicant's arguments filed 04/04/08 have been fully considered but they are not
persuasive.

Applicant's arguments with respect to claims 1-12, 14, and 16-20 have been
considered but are moot in view of the new ground(s) of rejection.

25. (A) In Hovell, neither the IPV6 domain 12 nor the IPV6 domain 14 is behind a
firewall.

As to point (A), in response to applicant' argument, the recitation "a client
application is behind a first firewall and a sever application behind a second
firewall" has not been given patentable weight because the recitation occurs in the

preamble. A preamble is generally not accorded any patentable weight where it

merely recites the purpose of a process or the intended use of a structure, and

where the body of the claim does not depend on the preamble for completeness

but, instead, the process steps or structural limitations are able to stand alone.

See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*,

187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU NGUYEN whose telephone number is (571) 272-4242. The examiner can normally be reached on 7AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JASON CARDONE can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. N./
Examiner: Minh-Chau Nguyen, Art Unit: 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145